

Total No. of Questions :10]

[Total No. of Printed Pages :3

Roll No

CS - 604

B.E. VI Semester

Examination, December 2012

Computer Networking

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks :35

*Note: Attempt One question from each unit.
All questions carry equal marks.*

UNIT I

1. (a) What is the principal difference between connectionless communication and connection oriented communication?
10
- (b) Consider 2^n-1 MPs connected by the following topologies
 - a) Star
 - b) Ring
 - c) Complete interconnectionfor each give the no of hoPs needed for the average IMP-IMP Packet. 10

OR

2. (a) Explain the OSI Model in detail. 10
- (b) What is computer network and how it is different from distributed system? 10

[2]

UNIT II

3. (a) Explain Goback N Protocell in detail. 10
 (b) A channel has bitrate of 4 Kbps and propagation delay of 20 msec. For what range of frame size does stop and wait give an efficiency of at least 50%. 10

OR

4. (a) Write short note on high level data link control protocell. 10
 (b) Explain 1 bit sliding window protocell. 10

UNIT III

5. (a) What is the difference between slotted ALOHA and Pure ALOHA? 10
 (b) How does CSMA/CD differ from CSMA/CA? 10

OR

6. (a) Compare a piconet and Scattering. 10
 (b) Write short note on FDDI Protocells. 10

UNIT IV

7. (a) What is the difference between unicast routing and Multi cast routing? 10
 (b) Write the difference between IPV₄ and IPV₆. 10

OR

8. (a) Explain Dijkstra algorithm with example. 10
 (b) Differentiate between congestion control and flow control. 10

[3]

UNIT V

9. (a) Explain the main features of transmission control
protocell. 10
- (b) What is network security and write the aspects of network
security? 10

OR

10. Write short note (any 2) 20
- (a) Digital Signature.
- (b) AIM
- (c) Cryptography
- (d) Finite State Machine.
